

CLAIM AMENDMENTS

31 3) ↗ ~~X~~ (Currently amended) A method for automatically processing objects of many different classes and types that are randomly presented to first identify the class of each object, then identify the type of object within an identified class of objects~~identifying and verifying documents to determine if they are genuine, counterfeit or altered,~~ the method comprising the steps of:

- 5 (a) capturing a complete representation of an entire object that is presented to be identified;
- (b) determining a first characteristic for each object presented to be identified using its complete representation captured in step (a), the first characteristic being used to identify one class of object from another class of object; of a first document to be verified, the first characteristic being common to a first group of documents that is less than all
- 10 documents;
- B 1 (c) retrieving a set of second characteristics for each object presented to be identified whose complete representation is captured in step (a) and whose class of object is identified in step (b), the second set of characteristics being used to identify the type of object from amongst the class of objects identified in step (b); and the first group of documents, where
- 15 individual documents in the first group of documents have ones of the second characteristics;
- (d) analyzing individual characteristics from the second set of characteristics retrieved in step (c) with characteristics actually in the complete object representation captured in step (a) found in the first document with each of the second characteristics to identify the first
- 20 type of object document from amongst the class of objects identified in step (b).
- ~~retrieving a set of reference information unique to the first document; and~~
- ~~comparing characteristics found in the first document with each of the set of reference information to determine if the first document is genuine, counterfeit or altered.~~

1 ~~X~~ (Currently amended) The method in accordance with claim 1 33 further comprising the

2 step of: (g) providing an indication that the first document an object is genuine, counterfeit or has

3 been altered based upon the results of the reference information comparing analysis performed in

4 step (f).

1 ~~X~~ (Currently amended) The method in accordance with claim 1 wherein the determination

2 of a first characteristic performed in step (b) first characteristic is to determine the size of an

3 ~~object being processed the first document, all documents~~ objects that may be identified and
4 verified are divided into size ranges and each class of objects includes all objects having the
5 same size. ~~the first group of documents are those documents within one of the size ranges, and~~
6 ~~the second characteristics are found at specific locations on individual documents of the first~~
7 ~~group of documents.~~

1 4. (Currently amended) The method in accordance with claim 3 wherein the second set of
2 characteristics retrieved in step (c) include color patterns at specific locations on objects ~~the~~
3 ~~documents.~~

1 5. (Currently amended) The method for automatically processing objects in accordance
2 with claim 1 further comprising the steps of:

B 3 (h) keeping track of each type of document identified in ordering all object types that are
4 identified in step (d) from the most commonly identified type of objects to the least commonly
5 identified type of objects ~~the first group of documents; and~~

6 (i) selecting second the retrieved characteristics from step (c) for use in step (d) the
7 ~~second characteristic comparing step starting with second characteristics for the most commonly~~
8 ~~identified object type of document in the first group of documents and progressing to the least~~
9 commonly identified object type.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Currently amended) A method for automatically processing objects of many different
classes and types that are randomly presented to first identify the class of each object, then
identify the type of object within an identified class of objects, identifying and verifying
~~documents to determine if they are genuine, counterfeit or altered,~~ the method comprising the
5 steps of:

- 15~
- B
- (a) determining a first characteristic for each object presented ~~the size of a first document to be identified; the first characteristic being used to identify one class of object from another class of object; verified, the size being common to a first group of documents that is less than all documents;~~
- 10 (b) identifying one class of objects from all classes of objects for each object presented to be identified using the first characteristic determined in step (a);
- (c) retrieving a set of first second characteristics for each object presented to be identified and whose class of object is identified in step (b); and the first group of documents; ~~where individual documents in the first group of documents have ones of the first~~ characteristics;
- (d) analyzing characteristics found in each object presented to be identified, the first document with each of the first retrieved characteristics to identify the first document; retrieving a set of reference information for the first document based upon the identity of the first document; and
- 20 ~~comparing characteristics found in the first document with each of the set of reference information to determine if the first document is genuine, counterfeit or altered.~~

1 12. (Currently amended) The method for automatically processing objects in accordance
2 with claim 11 further comprising the steps of:

3 (e) ~~keeping track of each type of document identified in~~ ordering all types of object that
4 are identified in step (d) from the most commonly identified type of object to the least commonly
5 identified type of object~~the first group of documents;~~ and

6 (f) selecting ~~first the retrieved~~ characteristics from step (b) for use in step (c) ~~for use in~~
7 ~~the first characteristic comparing step starting with first characteristics for the most commonly~~
8 ~~identified type of object document in the first group of documents and progressing to the least~~
9 commonly identified type of object.

1 ~~13.~~ (Currently amended) The method in accordance with claim ~~42~~ 35 further comprising the
2 step of (g) providing an indication that the an object identified in step (d) and verified in step (f)
3 ~~first document~~ is genuine, counterfeit or has been altered based upon the results of the third
4 ~~characteristics comparing analysis performed in step (e).~~

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Currently Amended) A computer readable medium containing executable instructions for automatically processing objects of many different classes and types that are randomly presented to first identify the class of each object, then identify the type of object within an identified class of objects, identifying and verifying documents objects to determine if they are
5 genuine, counterfeit or altered, the executable program instructions comprising program instructions for:

- (a) capturing a complete representation of an entire object that is presented to be identified;
determining a first characteristic of a first document to be verified, the first characteristic
being common to a first group of documents that is less than all documents;
- 10 (b) determining a first characteristic for each object presented to be identified using its
complete representation captured in step (a), the first characteristic being used to identify
one class of object from another class of object; of a first document to be verified, the
first characteristic being common to a first group of documents that is less than all
documents;
- 15 (c) retrieving a set of second characteristics for each object presented to be being identified
whose complete representation is captured in step (a) and whose class of object is
identified in step (b), the second set of characteristics being used to identify the type of
object from amongst the class of objects identified in step (b); and the first group of
documents, where individual documents in the first group of documents have ones of the
second characteristics;
- 20 (d) analyzing individual characteristics from the second set of characteristics retrieved in step
(c) with characteristics actually in the complete object representation captured in step (a)
found in the first document with each of the second characteristics to identify the first
type of object document from amongst the class of objects identified in step (b).
- 25 retrieving a set of reference information unique to the first document; and
comparing characteristics found in the first document with each of the reference
information to determine if the first document is genuine, counterfeit or altered.

32. (Cancelled)

- 1 ~~33.~~ (New) The method for automatically processing objects according to claim 1 where
2 identified objects are to be verified, and further comprising the steps of:
- 3 (e) retrieving a set of reference information unique to each type of object that is identified in
4 step (d); and
- 5 (f) analyzing each object whose complete representation is captured in step (a) using the
6 unique set of reference information retrieved in step (e) to verify if the type of object
7 identified in step (d) is genuine, counterfeit, or has been altered.

1 34. (New) The method for automatically processing objects according to claim 5 where
2 identified objects are to be verified, and further comprising the steps of:
3 (g) retrieving a set of reference information unique to each type of object that is identified in
4 step (d); and
5 (h) analyzing each type of object identified in step (d) using the unique set of reference
6 information retrieved in step (g) to verify if it is genuine, counterfeit, or has been altered.

1 ~~35~~ (New) The method for automatically processing objects according to claim 11 where
2 identified objects are to be verified, and further comprising the steps of:
3 (e) retrieving a set of reference information unique to each type of object that is identified in
4 step (d); and
5 (f) analyzing each object identified in step (a) using the unique set of reference information
6 retrieved in step (e) to verify if it is genuine, counterfeit, or has been altered.

1 36. (New) The method for automatically processing objects according to claim 12 where
2 identified objects are to be verified, and further comprising the steps of:
3 (g) retrieving a set of reference information unique to each type of object that is identified in
4 step (d); and
5 (h) analyzing each object identified in step (a) using the unique set of reference information
6 retrieved in step (e) to verify if it is genuine, counterfeit, or has been altered.

1 ~~37~~ (New) The computer readable medium executable instructions of claim 31 further
2 comprising instructions for:
3 (e) retrieving a set of reference information unique to each type of object that is identified in
4 step (d); and
5 (f) analyzing each object whose complete representation is captured in step (a) using the
6 unique set of reference information retrieved in step (e) to verify if the type of object
7 identified in step (d) is genuine, counterfeit, or has been altered.